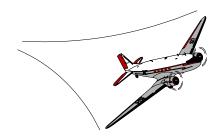
# SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service Washington, DC





U.S. Department of Transportation

Federal Aviation Administration

CE-05-15 November 10, 2004

## www.faa.gov/certification/aircraft

This is information only. Recommendations aren't mandatory.

#### Introduction

This Special Airworthiness Information Bulletin (SAIB) advises you, registered owners of **single or multi-engine piston airplanes**, of the need to properly maintain **pneumatic system components that power air-driven gyro instruments**.

Through this SAIB, the FAA is highly recommending that, if Parker Hannifin-Airborne Division air pumps and other components used in pneumatic systems that power air-driven gyro instruments are installed in your airplane, then you should follow the applicable Airborne maintenance, inspection, and replacement instructions. You can find these instructions in the form of service letters on the Parker Website at <a href="http://www.parker.com/ag/nad/sl.asp">http://www.parker.com/ag/nad/sl.asp</a>.

## **Background**

Air pump or pneumatic system failures can and do occur without warning. This can be a result of various factors, including, but not limited to, normal wear of components, improper installation or maintenance, contamination of the system, or premature failure. Failure of the air pump or any other component of the pneumatic system during instrument flight rules (IFR) flight in Instrument Meteorological Conditions (IMC) can lead to spatial disorientation of the pilot and consequent loss of aircraft control.

We published SAIB CE-01-29R1 on July 10, 2001, to provide a recommended method to preflight check the proper operation of the pneumatic system.

Use of a single-engine aircraft in IMC is increasing. Many single-engine aircraft do not have a backup pneumatic power source or back-up electric attitude gyro instruments. This increases the need for diligence in the maintenance, inspection, and replacement of components in pneumatic systems that power air-driven gyro instruments.

#### Recommendation

We highly recommend that you review Parker's maintenance, inspection, and replacement instructions. Parker Airborne Service Letters 38A, 39A, 43A, 53C, 54D, 57, 58, and 59B specifically address maintenance, inspection, and replacement instructions for air pumps, filters, check valves, check valve manifolds, and regulator check valve manifolds that are typically installed on general aviation piston airplanes. You can find these service letters on the Parker Website at <a href="http://www.parker.com/ag/nad/sl.asp">http://www.parker.com/ag/nad/sl.asp</a>.

### **For Further Information Contact**

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